Amendments to the Specification:

Please replace the Third Paragraph on page 14, with the following amended paragraph:

-- More particularly, when bytecodes are provided to a JIT compiler provided by a compiler 602, the compilation of methods contained in bytecodes 604 is delayed until the methods are about to be executed. When bytecodes 604 are provided to an interpreter 606, bytecodes 604 are read into interpreter 606 one bytecode at a time. Interpreter 606 then loads parameters corresponding to the operations defined by the bytecode into the execution stack ~~500~~ <u>301</u>. Once loaded, the interpreter 606 performs the operation defined by the bytecode 604. That is, interpreter 606 "interprets" bytecodes 604, as will be appreciated by those skilled in the art. In general, interpreter 606 processes bytecodes 604 and performs operations associated with bytecodes 604 substantially continuously. --

Please replace the Second Paragraph on page 15, with the following amended paragraph:

-- In order to compile a bytecode or sequence of bytecodes in the compiler 602, however, a finite amount of compilation time is required. Compilers decode source code into native machine instructions prior to execution so that decoding is not performed during execution. Because conventional interpreters decode each source code instruction before it is executed repeatedly each time the instruction is encountered, execution of interpreted programs is typically quite a bit slower than compiled programs because the native machine instructions of compiled programs can be executed on the native machine or computer system without necessitating source code decoding. Therefore, whenever performance is a significant factor, it is desirable to decode source code using the compiler instead of the interpreter. Therefore, when a bytecode or sequence of bytecodes is received by the virtual machine 600, a determination is made whether or not the bytecode or sequence of bytecodes is to be interpreted by the interpreter or compiled by the compiler. In the case where a received bytecode or sequence of bytecodes is to be processed by executing compiled code, for example, and the previous bytecode or sequence of bytecodes had been processed by the interpreter, a platform specific adapter must be provided. The platform specific

interpreter to compiled-code (I/C) adapter is used to translate the execution stack ~~500~~ 301 used by the interpreter to one that can be used by the compiled code. In addition, the adapter may update the state of other components in the system. --

Please replace the Second Paragraph on page 16, with the following amended paragraph:

-- Alternatively, when a previous bytecode or sequence of bytecodes has been processed by executing compiled code, possibly generated by the compiler 602, and it is determined to be more execution efficient to interpret the current bytecode or sequence of bytecodes, then a compiled-code to interpreter (C/I) adapter must be provided to appropriately translate the execution stack ~~500~~ 301 to one that can be used by the interpreter. In addition, the adapter may update the state of other components in the system. --